

Quantitative Usage Analysis for Tebuthiuron

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Tebuthiuron is primarily used as a broadspectrum herbicide that provides long-term control of annual and perennial grasses, herbaceous plants and woody brush. Tebuthiuron products include 20 percent pellets and 80 percent dry flowable formulations under the tradename Spike®. The states with the most area treated are located primarily in the Southwest and include: Texas, Oklahoma, New Mexico and Arizona. Application is usually conducted via a ground spray operation.

Based on available EPA data and expert opinion, the major use of tebuthiuron include range and pastureland, railroad rights of way, electric utility rights of way, and industrial facilities and pipelines. The total number of pounds of active ingredient applied annually of tebuthiuron has declined between the years 1996 through 1999 by approximately 40 percent from an estimated 230,000 pounds ai per year to less than 195,000 pounds ai per year. Estimated application rates per unit measurement ranged from less than a pound ai to 6 pounds depending upon application. For rangeland applications, rates averaged about 2 pounds ai per acre. Railroad applications rates averaged about 2 pounds ai per acre in 1999 as well.

In 1999, the distribution of the total annual pounds applied of tebuthiuron in percentage terms is 37 percent for rangeland/pastureland, 29 percent for railroad rights of way, and 28 percent for electric utilities. Industrial facilities and pipelines account for only 5.5 percent of the total pounds of tebuthiuron applied.

In terms of the percentage of the acres for each site treated in 1999 for each of the above sites, an average of less than 1 percent of rangeland/pastureland acreage was treated up to an estimated maximum 2 percent of acres treated annually. For the miles of railroad rights of way and electric utility rights of way treated annually, the average percentage of miles treated was less than 1 percent, respectively. No information pertaining to the percent of area treated for industrial facilities or miles of pipeline rights of way was available, but based on the percentage of a.i. allocated to these sites it is assumed that the percent of area/mileage treated is also averages less than 1 percent.

Estimated maximums for the above sites where little or no usage information is available can be estimated by doubling the average estimated use.

There is no agricultural crop use of tebuthiuron except for the range and pasture land uses.

SOURCES: EPA data, 1990-99; USDA, NASS, 1999, Cal EPA and National Center for Food and Agricultural Policy.

